

NOTES ON MESEMBRYANTHEMUM AND ALLIED GENERA

H. M. L. Bolus

Ruschia lisabeliae L. Bol. sp. nov.—Planta unica visa, fera glabra, ad 90 cm. diam.; rami primarii decumbentes rigidi, ad 60 cm. longi, internodiis brunneis, saepe 2—3·5 cm. longis, 2—4 mm. diam., senectis cum aetate atratis; ramuli ultimi florentes 2-foliati, foliis mox marcescentibus, gemmis axillaribus 2-foliatis; folia ascendentia, supra prope apicem leviter angustata, cum lateribus convexula, dorso rotundo vel carina ad lineam reducta, inconspicue mucronata, viridia, levissima politaque, 2—3·2 cm. longa, 3—5 mm. lata diametroque; flores 3-nati vel 2-ternati vel irregulariter 3-ternati, cymis gracilibus, 4—7·5 cm. longis cum pedunculo primario 2—3·5 cm. longo, 1—1·5 mm. diam., ramis ascendentibus, pedunculis ultimis ad 1·5 cm. longis, infra medium bracteatis; bractee foliis similes, 3—6 mm. longae; cymae fructiferae ad 17·5 cm. longae; receptaculum subclavatum, ad 3 mm. longum, ad 4 mm. diam., sepala 5, superne leviter angustata, apice breviter subulata, omnia $\pm$ marginata, 4—5 mm. longa, basi 1·5—2 mm. lata; petala 3-seriata, e parum supra medium inferne angustata, obtusa vel leviter emarginata, purpureo rosea, ad 11 mm. longa, 0·5—1·5 mm. lata; staminodia nulla; filamenta ca. 4-seriata, mox erecta, purpureo rosea, ad 3 mm. longa, intima prope basim roseo papillata, antheris pollineque luteis; discus inconspicuus crenulatus; ovarii lobi erecti, vix compressi, ad 1 mm. elevati; stigmata profunde posita, inferne anguste subulata, caudata, ad 2·5 mm. longa cum cauda 0·75 mm. longa; capsula infra subclavata, ad 5 mm. longa, supra per 2 mm. elevata, apice fere truncato, suturis vix compressis, 5 mm., expansa ad 6·5 mm., diam., dimidio inferiore valvae patente, superiore erecto, carinis inferne parallelis, superne divergentibus, dimidium valvae attingentibus, tuberculo parvo, processibus 2 apud os loculi dependentibus sat conspicuis.

Cape Province: in dit. Vanrhynsdorp; Hol River, “Sprawling over loose rocklets on east side of a small koppie, 3 or more feet in diameter, 4 or 5 plants seen”, Oct. 1965, *H. Hall* 3037.

Named after Mrs. Lisabel Hall who accompanied her husband on this interesting collecting trip.

Sphalmanthus rejuvenalis L. Bol. sp. nov. (*Trichotomi*).—Planta 1 visa, fera glabra senectissima, 25 cm. alta, ca. 26 cm. diam.; caulis lignosus, 1·8 cm. diam., ramos 21, crebres graciles atratos, quasi mortuos, ferens; ramuli hornotini floriferi 4 visi, 7·5—13 cm. longi, internodiis inferioribus 2—3 cm. longis; partes herbaceae sat glauce virides; folia ascendentia, supra plana, dorso

rotundo, superne leviter angustata, levissima, ad 3 cm. longa, ad 5 mm. diam.; flores 3-nati meridiani; pedunculi ca. 4 mm. longi; receptaculum globose obconicum, 5 mm. longum, ad 8 mm. diam.; calycis tubus 2 mm. longus, segmentis 4, e medio superne angustatis, obtusis vel subacutis, valde inaequilongis, 1—1.9 cm. longis; corolla ad 1.5 cm. longa, tubo ca. 1.5 mm. longo, segmentis ca. 3-seriatis, obtusis, externe rubicunde aureis, interne salmoneis, basim versus pallidis, ad 0.75 mm. latis; staminodia filiformia, sat pauca; stamina 5—8 mm. longa, antheris pollineque luteis; ovarium ad 1.5 mm. elevatum; stigmata 4, anguste subulata, rubra, 3 mm. longa.

Cape Province: in dit. Vanryhnsdorp; Hol River, Oct. 1965, *H. Hall* 3038. "Only one plant seen, growing on summit of koppie with *Eberlanzia persistens*. The fresh growth sprouting from what appeared to be dead branches was remarkable".

Monilaria brevifolia L. Bol. forma.—A forma typica receptaculo obconico praecipue differt.

This species (with one or two others) differs from the *Eumonilaria*-group in having some of the internodes elongated or exserted, and the term "Exserta" has been used in my Key to the genera (published in 1958) to distinguish them as a section from the older group.

Three collections of this form made by *H. Hall* are represented in the Bolus Herbarium: at Koekenaap in Oct. 1954 (Bolus Herbarium 25666) and again in Sept. 1955, the third being at Hol River in Oct. 1964 (*Hall* 2866). This plant, with the flowers, which completely veiled it, up to 5 cm. in diameter, was 17—23 cm. in height and 26 cm. and 31 cm. in diameters, the stem up to 4 cm. in diameter. "All the plants at Hol River had glorious rose pink flowers which were a lovely sight on the black stony slopes" (*Hall*).

Amphibolia stayneri L. Bol. sp. nov.—Plantae 4 visae, glabrae, cum floribus ad 7 cm. altae; radix tuberosa, tubere inferne longe angustato, ad 6 cm. longo, prope apicem ad 1.2 cm. diam.; rami primarii ad 5 mm. diam., hornotini graciles brunnei, ad 1.5 mm. diam., interdum prope basim squama onusti, internodiis saepius 1 cm. longis vel in ramulis inclusis; folia ascendentia, supra plana, fere e medio superne angustata, acuta, conspicue mucronata, viridia scabrida, ad 1.7 cm. longa, medio 1.5—2 mm. lato diametroque, vel rarius ovata vel lanceolata ovata, carina obscura, 6—8 mm. longa, vagina ad 1.5 mm. longa; flores solitarii meridiani, ad 2 cm. diam.; pedunculi teretes graciles, a receptaculo distincti; bractee basales, foliis similes; receptaculum globose obconicum, prope apicem leviter constrictum, ad 3 mm. longum, 5—6 mm. diam.; sepala 5, fere e basi angustata, mucronata, ad 5—6 mm. longa, basi 2—4 mm. lata, interiora 3 marginata; petala ca. 2-seriata, inferne ex infra medium et prope apicem leviter angustata, acuta vel obtusa, purpureo rosea,

saturatiore utrimque vittata, 6—7 mm. longa, ad 0·75 mm. lata; staminodia ad stamina conice conferta appressa eaque leviter excedentia, acuminata, inferne pallida, superne purpureo rosea; filamenta ca. 4—5-seriata, ad 3·5 mm. longa, intima supra medium dense papillata, antheris pollineque primum pallide luteis; discus crenulatus vel profunde denticulatus; ovarii lobi obtuse compressi, sat distantes, discum attingentes, leviter elevati; stigmata 5, inferne anguste subulata, fimbriata viridia, ad 3·5 mm. longa cum cauda 1 mm. longa; capsulae senectae tantum visae, infra globose obconicae, 4 mm. longae, 7 mm., expansae 1·3 cm., diam., tuberculo parvo, carinis parallelis in dimidio inferiore valvae, in dimidio superiore late divergentibus, dimidium valvae attingentibus, alis liberis in dimidio superiore.

Cape Province: in dit. Ceres; “between Matroosberg and Theronssberg Pass, 4,000 ft.”, Sept. 1965, *F. J. Stayner*. Karoo Garden 258/65.

Astridia vanbredai L. Bol. sp. nov.—Planta 1 visa, glabra, ca. 26 cm. alta, caule ad 9 mm. diam.; ramuli ultimi 6-foliati; folia fere erecta vel demum late patentia, interdum subfalcata, supra e medio superne angustata, acuta vel acuminata, lat. visa e supra medium angustata, acuta vel obtusa, 4—5 cm. longa, 6—8 mm. lata, 8—10 mm. diam., eis bracteas subtendentibus 2—3 cm. longis; bracteae manu complanatae in dimidio inferiore circulateae, ad 1·2 cm. diam., in superiore ovatae acutissimae, ad 1·3 cm. longae, 5 mm. diam.; receptaculum 2—3 mm., vel rarius ad 4 mm., longum, ad 1 cm. diam.; sepalia exteriora obtusa, interiora in dimidio superiore acute vel obtuse subulata, 8—12 mm. longa, basi 3—9 mm. lata; petala ca. 4-seriata, e supra medium inferne angustata, saepius obtusa vel rotunda, laete purpureo rubra, prope basim pallida, 1·7—3 cm. longa, 0·5—3 mm. lata; staminodia pallida vel prope apicem rubra, stamina aequantia vel excedentia; filamenta 6—7-seriata, exteriora ciliate papillata, interiora interdum dense papillata, alba vel exteriora aurea vel rubra, antheris pollineque aureis; ovarii lobi erecti, ad 2 mm. elevati; stigmata inferne angustissime subulata, longe attenuata, 4—5 mm. longa, cauda brevissima; capsula senecta tantum visa, infra brevissime obconica, ca. 2 mm. longa, ca. 1·1 cm., expansa 1·4 cm., diam., valvis fere erectis manentibus, supra per 4 mm. elevata, carinis medium valvae, vel parum ultra, attingentibus, inferne parallelis distantibusque, deinde late divergentibus incurvatisque, arista ca. 1 mm. longa; semina non visa.

Cape Province: Namaqualand; Helskloof, *P. A. B. van Breda* 1694/60. Fl. Veld Reserve, Worcester, Jun. 1962, Feb. 1964, et Mart. 1965.

Lampranthus proximus L. Bol. sp. nov.—Ad *L. prominulum* (L. Bol.) L. Bol. valde affinis, sed punctis multo minus prominentibus, petalis inferne minus angustatis, brevioribus latioribusque, staminodiis paucissimis, filamentis longioribus, stigmatibus inferne angustissime subulatis, stamina interdum superantibus differt.

Petala ad 1 cm. longa, ad 2 mm. lata; filamenta 2—3-seriata, ad 4·5 mm. longa, antheris pollineque primum luteis; capsula infra obconica, 5 mm. longa, ad 6 mm., expansa 1·1 cm., diam., supra per 2 mm. elevata, suturis compressis, carinis parallelis, cum alis apicem valvae attingentibus.

Cape Province: in dit. Cape; Fisantekraal, "near Klappmuts turn-off to Agter Paarl", Sept. 1965, *J. E. Nel*. Bolus Herbarium 27738.

Of this area Dr. Nel writes: "Nowhere else have I seen such an immense variety of small flowers as found on this area of undisturbed veld during early spring".

Gibbaeum haagei Schwant. var. **parviflorum** L. Bol. var. nov.—Plantae plures visae, senectae, ad 15 cm. et 13 cm. diam., medio 7 cm. alto; ramuli hornotini floriferi 2-foliati, sed quasi 4-foliati ob gemmam axillarem bene evolutam (ut in genere solitam est); partes herbaceae minutissime pubescentes, tactu velutino; folia matura supra visa late ovata, acuta, lateraliter visa in longioribus apice rotundo vel subtruncato, in brevioribus obliquo, abrupte acuto (novella ad 1·3 cm. longa aequilonga et similia), ad 5·5 cm. et 3·5 cm. longa, ad 2·7 cm. lata, longioribus ad 2 cm., brevioribus ad 3 cm., diam.; pedunculi ad 1·5 mm. longi; receptaculum compressum, 4—5 mm. et 7—12 mm. diam., in pedunculum insensim transeuns; sepala 6, omnia compressa carinataque, exteriora 1—1·3 cm. longa, 4—5 mm. diam., interiora 5—6 mm. vel 5—8 mm. longa, 1·5—2 mm. diam.; petala exteriora 2-seriata, parum inaequilonga, ad 11 mm. longa, ad 1·25 mm. lata, e parum supra medium inferne leviter angustata, purpureo rosea, inferne vittata, vitta superne saepe obscura, interiora pauca, acuminata, in staminodia transeuntia, ad 7 mm. longa; staminodia acuminata pallida, stamina longissima aequantia vel excedentia; filamenta ca. 5-seriata, alba, intima obscure papillata vel nuda, ad 5 mm. longa, antheris pollineque luteis; glandulae approximatae conspicuae; ovarii lobi erecti distantes, superne obtuse compressi, ca. ad 1·5 mm. elevati.

Cape Province; in dit. Swellendam; "on the farms 'Uitvlugt' and 'Witkop'", *P. A. B. van Breda* 1754/62. Fl. Veld Reserve, Worcester, Oct. 1964. "This was first collected on the farm "Uitvlucht", Swellendam District. Then we visited the farm "Witkop" and found the plant even more plentiful there. They grow on gravelly patches or pans in such numbers that one could not avoid treading on the plants". (*P. A. B. van Breda*).

Octopoma conjunctum (L. Bol.) L. Bol. comb. nov. *Ruschia conjuncta* L. Bol., Mesemb. II: 239.

NOTE.—The type specimens of all new species described in this paper are in the Bolus Herbarium, University of Cape Town.

(To be continued)